

## Standards Actions April 2003

Visit the Technical Standards  
Program Web Site at  
<http://tis.eh.doe.gov/techstds/>



### DOE Technical Standards Program Document Status

03-31-2003

#### Activity Summary

In Conversion – 4

In Preparation – 47

Out for Comment – 27

Published this Month – 2



#### 5-year Review Status

Revision in Progress – 11

Reaffirmation in Progress – 8

Cancellation Pending – 19

Cancellation in Progress – 4

No Current Action – 0

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# STANDARDS ACTIONS



## DOE Technical Standards Projects Initiated

Complete listings of all DOE Technical Standards projects and their status are given on the Technical Standards Program (TSP) Web Site (<http://tis.eh.doe.gov/techstds/>). To access these lists from the home page, click on “DOE Technical Standards,” then click on “Projects” in the left-hand frame to show the links to the project lists.

- *Content of System Design Descriptions* (Revision of DOE-STD-3024-98), Project Number EDCO-0002; Project Contact: John Fredlund, NA-53; phone 301-903-3059; fax 301-903-8754; e-mail [John.Fredlund@nnsa.doe.gov](mailto:John.Fredlund@nnsa.doe.gov).
- *Guide to Good Practices for Operational Readiness Reviews (ORR) Team Leader's Guide* (Revision of DOE-HDBK-3012-96), Project Number OPER-0004, Project Contact: Jeffry Roberson, DOE/NNSA; phone 301-903-8026; fax 301-903-8754; e-mail [Jeffry.Roberson@nnsa.doe.gov](mailto:Jeffry.Roberson@nnsa.doe.gov).
- *Uninterruptible Power Supply* (Proposed Cancellation of DOE-SPEC-3021-97), Project Number SAFT-0088, Project Contact: John Fredlund, NA-53; phone 301-903-3059; fax 301-903-8754; e-mail [John.Fredlund@nnsa.doe.gov](mailto:John.Fredlund@nnsa.doe.gov).

## DOE Technical Standards Proposed for Reaffirmation

The full text of the documents is available on the TSP Web Site. If you wish to comment on these documents, please notify your Technical Standards Manager (TSM).

- DOE-HDBK-1001-96, *Guide to Good Practices for Training and Qualification of Instructors*.
- DOE-HDBK-1002-96, *Guide to Good Practices for Training and Qualification of Chemical Operators*.
- DOE-HDBK-1003-96, *Guide to Good Practices for Training and Qualification of Maintenance Personnel*.
- DOE-HDBK-1080-97, *Guide to Good Practices for Oral Examinations*.
- DOE-HDBK-1084-95, *Primer on Lead-Acid Storage Batteries*.
- DOE-HDBK-1099-96, *Establishing Nuclear Facility Drill Programs*.
- DOE-HDBK-1103-96, *Table-Top Needs Analysis*.
- DOE-HDBK-1114-98, *Guide to Good Practices for Line and Training Manager Activities*.
- DOE-HDBK-1116-98, *Guide to Good Practices for Developing and Conducting Case Studies*.
- DOE-HDBK-1200-97, *Guide to Good Practices for Developing Learning Objectives*.
- DOE-HDBK-1201-97, *Guide to Good Practices: Evaluation Instrument Examples*.
- DOE-HDBK-1202-97, *Guide to Good Practices for Teamwork Training and Diagnostic Skills Development*.

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- DOE-HDBK-1203-97, *Guide to Good Practices for Training of Technical Staff and Managers*.
- DOE-HDBK-1204-97, *Guide to Good Practices for Development of Test Items*.
- DOE-HDBK-1205-97, *Guide to Good Practices for the Design, Development, and Implementation of Examinations*.
- DOE-HDBK-1206-98, *Guide to Good Practices for On-The-Job Training*.
- DOE-STD-1029-92, *Writer's Guide for Technical Procedures (Including Change Notice 1; December 1998)*.

A review period ending April 30, 2003, has been set to provide the opportunity for interested persons to comment on these reaffirmation proposals. All comments and questions should be routed through your site TSM, who will relay your responses to the contact. If you have any questions or comments about any of these standards, please contact M. Norman Schwartz, [Norm.Schwartz@eh.doe.gov](mailto:Norm.Schwartz@eh.doe.gov).

## DOE Technical Standards Projects Discontinued

- QCIC-0003, *Total Management System – A Guide to Quality Assurance Requirements*.
- QCIC-0004, *DOE Handbook of Management Assessment*.
- QCIC-0005, *DOE Handbook of Quality Improvement Concepts, Tools, and Techniques*.
- QCIC-0006, *Profiling and Improving Work Processes Handbook*.
- QCIC-0007, *Independent Assessment Concepts Handbook*.
- SAFT-0018, *Guideline for the Format and Content of Safety Analysis Reports for DOE Nuclear Facilities and Nonfacility Nuclear Operations*.

Please contact M. Norman Schwartz, [Norm.Schwartz@eh.doe.gov](mailto:Norm.Schwartz@eh.doe.gov), if you have questions about these discontinued Projects.

## DOE Technical Standards Recently Published

The following DOE Technical Standards were recently published and posted on the TSP Web Site:

- DOE-STD-1159-2003, *Waste Management Functional Area Qualification Standard*, March 2003.
- DOE-STD-1160-2003, *Occupational Safety Functional Area Qualification Standard*, March 2003.

**DOE employees and DOE contractors** may obtain copies from the ES&H Technical Information Services, U.S. Department of Energy; 800-473-4375, Fax 301-903-9823.

**Subcontractors and the general public** may obtain copies from the U.S. Department of Commerce, Technology Administration, National Technical Information Service, Springfield, Virginia 22161; 703-605-6000, Fax 703-605-6900.

## Non-Government Standards

### American National Standards Institute

The American National Standards Institute (ANSI) publishes coordination activities of non-Government standards (NGS) biweekly in *ANSI Standards Action*. Recent electronic copies (no hardcopies are produced) are available on the ANSI Web site at [http://web.ansi.org/rooms/room\\_14/](http://web.ansi.org/rooms/room_14/). Electronic back copies are available to ANSI members only. For information on site membership, ask your local ANSI contact. For information on individual or group ANSI membership, contact Susan Bose at 212-642-4948 or [sbose@ansi.org](mailto:sbose@ansi.org).

Hardcopy versions of published non-Government standards listed in this section may be obtained from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado, 80112, 800-854-7179, Fax 303-397-2740, [global@ihts.com](mailto:global@ihts.com), <http://global.ihts.com>. Electronic delivery of selected documents is available through ANSI at <http://webstore.ansi.org>. Copies of the listed draft standards and the procedure for commenting on them may be obtained by contacting the standards developing organization.

The following listings are extracted from *ANSI Standards Action* and are representative of NGS development activities that may be relevant to DOE operations. Refer to *ANSI Standards Action* for a more extensive listing of changes and new publications, standards developing organizations, and additional information about submitting comments. Additional information on ANSI activities and available non-Government standards can be found on the ANSI Web site, <http://www.ansi.org>, or through the National Standards System Network, <http://www.nssn.org>.

**The following American National Standards are currently in coordination** (comment due dates follow each entry):

- ASME A90.1-200x, *Safety Standard for Belt Manlifts* (revision of ANSI/ASME A90.1-1997) – May 13, 2003.
- ASME A112.20.1-200x, *Qualification of Installers of High Purity Piping Systems* (new standard) – May 6, 2003.

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- ASME A112.20.2-200x, *Qualification of Installers of Firestop Systems and Devices for Piping Systems* (new standard) – May 20, 2003.
- ASME B16.5-200x, *Piping Flanges and Flanged Fittings NPS 1/2 Through NPS 24* (revision of ANSI/ASME B16.5-1996) – May 6, 2003.
- ASME B19-200x, *Performance Criteria for the Design, Construction, Care, and Operation of Safeguarding When Referenced by the Other B11 Machine Tool Safety Standards* (revision of ANSI B11.19-1990 (R1997)) – April 27, 2003.
- ASME OMb Code-200x, *Code for Operation and Maintenance of Nuclear Power Plants* (revision of ANSI/ASME OM Code-2001) – May 6, 2003.
- ASME OMb-S/G-200x, *Standards and Guides for Operation and Maintenance of Nuclear Power Plants* (revision of ANSI/ASME OMb-S/G-2002) – May 6, 2003.
- ASME PTC 17-1973 (R1997), *Performance Test Code — Reciprocating Internal-Combustion Engines* (reaffirmation of ANSI/ASME PTC 17-1973 (R1997)) – May 6, 2003.
- AWS C5.5-1980, *Recommended Practices for Gas Tungsten Arc Welding* (revision of ANSI/AWS C5.5-80 (R1994)) – May 20, 2003.
- CSA FC3-200x, *Portable Fuel Cell Power Systems* (new standard) – May 13, 2003.
- NACE RP0502-200x, *Pipeline External Corrosion Direct Assessment Methodology* (new standard) – May 5, 2003.
- NFPA 20-200x, *Standard for the Installation of Stationary Pumps for Fire Protection* (revision of ANSI/NFPA 20-1999) – May 20, 2003.
- NFPA 30-200x, *Flammable and Combustible Liquids Code* (revision of ANSI/NFPA 30-2000) – May 20, 2003.
- NFPA 51B-200x, *Standard for Fire Prevention During Welding, Cutting, and Other Hot Work* (revision of ANSI/NFPA 51B-1998) – May 20, 2003.
- NFPA 130-200x, *Standard for Fixed Guideway Transit and Passenger Rail Systems* (revision of ANSI/NFPA 130-2000) – May 20, 2003.
- NFPA 252-200x, *Standard Methods of Fire Tests of Door Assemblies* (revision of ANSI/NFPA 252-1999) – May 20, 2003.
- NFPA 256-200x, *Standard Methods of Fire Tests of Roof Coverings* (revision of ANSI/NFPA 256-1998) – May 20, 2003.
- NFPA 274-200x, *Standard Test Method to Evaluate Fire Performance Characteristics of Pipe Insulation* (new standard) – May 20, 2003.
- NFPA 306-200x, *Standard for the Control of Gas Hazards on Vessels* (revision of ANSI/NFPA 306-2001) – May 20, 2003.
- NFPA 496-200x, *Standard for Purged and Pressurized Enclosures for Electrical Equipment* (revision of ANSI/NFPA 496-1998) – May 20, 2003.
- NFPA 853-200x, *Standard for the Installation of Stationary Fuel Cell Power Plants* (revision of ANSI/NFPA 853-2000) – May 20, 2003.
- NFPA 1021-200x, *Standard for Fire Officer Professional Qualifications* (revision of ANSI/NFPA 1021-1997) – May 20, 2003.
- NFPA 1031-200x, *Standard for Professional Qualifications for Fire Inspector and Plan Examiner* (revision of ANSI/NFPA 1031-1998) – May 20, 2003.
- NFPA 1033-200x, *Standard for Professional Qualifications for Fire Investigator* (revision of ANSI/NFPA 1033-1998) – May 20, 2003.
- NFPA 1620-200x, *Recommended Practice for Pre-Incident Planning* (revision of ANSI/NFPA 1620-1998) – May 20, 2003.
- UL 80-200x, *Standard for Safety for Steel Tanks for Oil-Burner Fuel* (revision of ANSI/UL 80-2000) – April 14, 2003.
- UL 444-200x, *Standard for Safety for Communications Cables* (revision of ANSI/UL 444-2002) – April 6, 2003.
- UL 1047-200x, *Standard for Safety for Isolated Power Systems Equipment* (revision of ANSI/UL 1047-1999) – April 21, 2003.
- UL 1277-200x, *Standard for Safety for Electrical Power and Control Tray Cables with Optional Optical-Fiber Members* (Bulletin dated March 19, 2003) (revision of ANSI/UL 1277-1997) – May 12, 2003.
- UL 1323-200x, *Standard for Safety for Scaffold Hoists* (Reference Standard Dated: July 23, 1999) (new standard) – May 12, 2003.
- UL 1651-200x, *Standard for Safety for Optical Fiber Cable* (revision of ANSI/UL 1651-1997) – May 5, 2003.
- UL 1703-200x, *Standard for Safety for Flat-Plate Photovoltaic Modules and Panels* (Bulletin dated 02/28/03) (revision of ANSI/UL 1703-2000) – April 28, 2003.
- UL 2080-200x, *Fire Resistant Tanks for Flammable and Combustible Liquids* (new standard) – May 5, 2003.

**The following American National Standards have been approved for publication.** Publication status and ordering

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information may be obtained from ANSI's Customer Service at 212-642-4900. (Publication is to take place within six months following the date shown.)

- ANSI C37.54-2003, *High-Voltage Switches, Bus Supports and Accessories – Schedule of Preferred Ratings, Construction Guidelines and Specifications* (revision of ANSI C37.54-1996) – March 21, 2003.
- ANSI C37.55-2003, *Medium Voltage Metal-Clad Switchgear Assemblies – Conformance Test Procedures* (revision of ANSI C37.55-1989 (R1996)) – March 21, 2003.
- ANSI/ANS 58.21-2003, *External Events PRA Methodology* (new standard) – March 3, 2003.
- ANSI/API 573-2003, *Inspection of Fired Boilers and Heaters (Second Edition)* (revision of ANSI/API 573-1992) – February 21, 2003.
- ANSI/ASME HPS-Part II-2003, *High Pressure Systems (Part II)* (revision of ANSI/ASME HPS-1994) – March 21, 2003.
- ANSI/ASTM D3245-2003, *Test Method for Pumpability of Industrial Fuel Oils* (revision of ANSI/ASTM D3245-1996) – March 10, 2003.
- ANSI/ASTM D3645-2003, *Test Methods for Beryllium in Water* (revision of ANSI/ASTM D3645-2002 – January 10, 2003).
- ANSI/ASTM D3648-2003, *Practices for the Measurement of Radioactivity* (revision of ANSI/ASTM D3648-1995) – March 10, 2003.
- ANSI/AWS B5.15-2003, *Specification for the Qualification of Radiographic Interpreters* (new standards) – March 20, 2003.
- ANSI/AWS F1.6-2003, *Guide for Estimating Welding Emissions for EPA and Ventilation Permit Reporting* (new standard) – February 25, 2003.
- ANSI/IEEE 497-2002, *Standard Criteria for Accident Monitoring Instrumentation for Nuclear Power Generating Stations* (new standard) – March 7, 2003.
- ANSI/IEEE 1110-2002, *Guide for Synchronous Generator Modeling Practices and Applications in Power System Stability Analyses* (new standard) – February 26, 2003.
- ANSI/IEEE C62.41.2-2002, *Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and Less) AC Power Circuits* (new standard) – March 10, 2003.
- ANSI/ISA 12.13.01-2002 (IEC 61779-1 through 5 Mod), *Performance Requirements, Combustible Gas Detectors* (revision of ANSI/ISA 12.13.01-2000) – February 26, 2003.
- ANSI/ISA 12.27.01-2002, *Requirements for Process Sealing Between Electrical Systems and Flammable or Combustible Process Fluids* (new standard) – February 26, 2003.
- ANSI/ISA RP12.13.02 (IEC 61779-6 Mod)-2002, *Recommended Practice for the Installation, Operation, and Maintenance of Combustible Gas Detection Instruments* (new standard) – February 26, 2003.
- ANSI/UL 1072-2003, *Standard for Safety for Medium-Voltage Power Cables* (revision of ANSI/UL 1072-1988) – March 5, 2003.

**The following international standards are currently in coordination** (comment due dates follow each entry):

- IEC 60794-4 Ed 2.0: *Optical fiber cables – Part 4: Sectional specification – Aerial optical cables along electrical power lines* – May 2, 2003.
- IEC 61511-2: *Functional safety – Safety instrumented systems for the process industry sector – Part 2: Guidelines for the application of IEC 61511-1* – May 9, 2003.
- ISO/DIS 10018, *Complaints handling – Guidelines for organizations* – May 14, 2003.
- ISO/DIS 10156-2, *Gas cylinders – Gases and gas mixtures – Part 2: Determination of oxidizing ability of toxic and corrosive gases and gas mixtures* – May 21, 2003.
- ISO/DIS 14839-2, *Mechanical vibration – Vibration of rotating machinery equipped with active magnetic bearings – Part 2: Evaluation of vibration* – May 14, 2003.
- ISO/DIS 15864, *Space systems – Unmanned spacecraft design, performance and quality assessment – General test methods for system, subsystem and unit levels* – May 28, 2003.
- ISO/DIS 17353, *Water quality – Determination of selected organotin compounds – Gas chromatographic method* – June 21, 2003.
- ISO/DIS 19238, *Radiation protection – Performance criteria for service laboratories performing biological dosimetry by cytogenetics* – May 28, 2003.

**The following newly published international standards are available:**

- ISO 8778:2003, *Pneumatic fluid power – Standard reference atmosphere.*
- ISO 10576-1:2003, *Statistical methods – Guidelines for the evaluation of conformity with specified requirements – Part 1: General principles.*
- ISO 12468-1:2003, *External exposure of roofs to fire – Part 1: Test method.*

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- ISO 13374-1:2003, *Condition monitoring and diagnostics of machines – Data processing, communication and presentation – Part 1: General Guidelines*.
- ISO 14912:2003, *Gas analysis – Conversion of gas mixture composition data*.
- ISO 15767:2003, *Workplace atmospheres – Controlling and characterizing errors in weighing collected aerosols*.

## American National Standards Projects Initiated

The following is a list of proposed new American National Standards or revisions to existing American National Standards submitted to ANSI by accredited standards developers. DOE employees or contractors interested in participating in these activities should contact the appropriate standards developing organization. DOE-TSL-4 lists the DOE representatives on NGS committees. If no DOE representative is listed, contact the TSPO for information on participating in NGS activities.

### American Institute of Steel Construction (AISC)

**Office:** One East Wacker Drive, Suite 3100  
Chicago, IL 60601-2001

**Contact:** Cynthia Lanz

**Fax:** 312-644-4226

**E-mail:** [lanz@aisc.org](mailto:lanz@aisc.org)

- AISC 360-200x, *Specification for the Design of Structural Steel Buildings* (new standard).

### American Society of Mechanical Engineers (ASME)

**Office:** 3 Park Avenue, 20th Floor  
New York, NY 10016

**Contact:** Silvana Rodriguez-Bhatti

**Fax:** 212-591-8501

**E-mail:** [rodriguezs@asme.com](mailto:rodriguezs@asme.com)

- ASME A112.6.3-200x, *Floor and Trench Drains* (revision of ANSI/ASME A112.6.3-2001).

### ASTM International (ASTM)

**Office:** 100 Barr Harbor Drive  
West Conshohocken, PA 19428

**Contact:** Tom O'Toole

**Fax:** 610-832-9666

**E-mail:** [totoole@astm.org](mailto:totoole@astm.org)

- ASTM Z0008Z-200x, *Standard Practice for Specimen Preparation and Mounting of Wall Coverings to Assess Surface Burning Characteristics* (new standard).

### Institute of Electrical and Electronics Engineers (IEEE)

**Office:** 445 Hoes Lane, P.O. Box 1331  
Piscataway, NJ 08855-1331

**Contact:** Angela Ortiz

**Fax:** 732-562-1571

**E-mail:** [a.ortiz@ieee.org](mailto:a.ortiz@ieee.org)

- IEEE 1642-200x, *Recommended Practice for Protecting Public Accessible Computer Systems from Intentional EMI* (new standard).
- IEEE C37.06-200x, *Standard for AC High-Voltage Circuit Breakers – Preferred Ratings and Related Required Capabilities* (new standard).
- IEEE C37.12-200x, *Standard for AC High-Voltage Circuit Breakers – Specification Guide* (new standard).
- IEEE C37.48-200x, *Guide for the Application, Operation, and Maintenance of High-Voltage Fuses, Distribution Enclosed Single-Pole Air Switches, Fuse Disconnecting Switches, and Accessories* (revision of ANSI/IEEE C37.48-1997).
- IEEE C57.127-200x, *Guide for the Detection and Location of Acoustic Emissions from Partial Discharges in Oil-Immersed Power Transformers and Reactors* (new standard).

### Underwriters Laboratories, Inc. (UL)

**Office:** 1655 Scott Boulevard  
Santa Clara, CA 95050

**Contact:** Linda Phinney

**Fax:** 408-556-6153

**E-mail:** [Linda.L.Phinney@us.ul.com](mailto:Linda.L.Phinney@us.ul.com)

- UL 499-200x, *Standard for Safety for Electric Heating Appliances* (new standard).
- UL 977-200x, *Standard for Safety for Fused Power-Circuit Devices* (new standard).
- UL 2080-200x, *Fire Resistant Tanks for Flammable and Combustible Liquids* (new standard).
- UL 2201-200x, *Standard for Safety for Portable Engine-Generator Assemblies* (new standard).

### ASTM International

Standards activities of ASTM International (ASTM) are published monthly in *ASTM Standardization News*. Orders for subscriptions or single copies of *ASTM Standardization News* may be submitted to ASTM, Subscription Dept.-SN, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959. For information regarding ASTM membership, contact the Membership Services Department at 610-832-9691, Fax: 610-832-9667. ASTM publications may be ordered from the

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ASTM Customer Services Department at (610) 832-9585, Fax: 610-832-9555. Comments on listed draft standards may be submitted by contacting the ASTM Standards Coordination Department at the above address. Questions may be addressed to the Technical Committee Operations Division at 610-832-9672, Fax: 610-832-9666. Additional information on ASTM activities is available on the ASTM Web site (<http://www.astm.org>). The following listings are extracted from ASTM *Standardization News* and are representative of NGS development activities that may be relevant to DOE operations.

**The following ASTM standards are currently in coordination** (the due date for all items is April 10, 2003):

- A 479/A 479M-02a, *Specification for Stainless Steel Bars and Shapes for Use in Boilers and Other Pressure Vessels* – revised standard.
- C 1483-00, *Specification for Exterior Solar Radiation Control Coatings on Buildings* – revised standard.
- D 4919-89(1997), *Specification for Testing of Hazardous Materials Packagings* – revised standard.
- E 6-02a, *Terminology Relating to Methods of Mechanical Testing* – revised standard.
- E 2061-02a, *Guide for Fire Hazard Assessment of Rail Transportation Vehicles* – revised standard.
- E 2257, *Test Method for Room Fire Test of Wall and Ceiling Materials and Assemblies* – revised standard.

**The following newly published standards are available from ASTM:**

- A 106-02a, *Specification for Seamless Carbon Steel Pipe for High-Temperature Service* – revised standard.
- D 3878-02a, *Terminology for Composite Materials* – revised standard.
- E 1325-02, *Terminology Relating to Design of Experiments* – revised standard.
- E 1626-02, *Guide for Including Government Procurement Requirements in ASTM Documents* – revised standard.
- E 2238-02, *Guide for Evacuation Route Diagrams* – new standard.
- G 40-02, *Terminology Relating to Wear and Erosion* – revised standard.

### Comments, Questions, and Addresses

Comments: If you have any questions or comments, please contact Rick Serbu, EH-53, Manager, DOE Technical Standards Program Office (TSPO), 301-903-2856, Fax 301-903-6172, [Richard.Serbu@eh.doe.gov](mailto:Richard.Serbu@eh.doe.gov).

Addresses: *Standards Actions* and *The Standards Forum* are electronic newsletters available on the TSP Web Site (<http://tis.eh.doe.gov/techstds/>). To update your mailing and e-mail addresses, please contact Debbie Queener, ORNL, 865-574-0398, Fax 865-574-8481, [queenerds@ornl.gov](mailto:queenerds@ornl.gov).

Technical Standards Activities: The TSPO would like to be kept informed of the status of technical standards that are being prepared or coordinated for DOE. Please provide this information to the TSPO at 865-574-0398, [queenerds@ornl.gov](mailto:queenerds@ornl.gov).